

Notice of Allowability	Application No.	Applicant(s)	
	10/632,974	NOMURA, TOSHIYUKI	
	Examiner	Art Unit	
	Huyen X. Vo	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/18/2005.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☒ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
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DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Ian Blum on 1/5/2006. The application has been amended as follows:

Claims 1, 5, and 9 have been amended as follows:

1. A speech coder comprising:

a control circuit which is effective to receive a coding delay and a designated bit rate as control data and which generates control parameters on the basis of the coding delay and the designated bit rate; and

a speech coding circuit which codes an input speech signal, on the basis of said control parameters, into an input excitation signal, the coding performed so as to minimize distortion of a reproduced speech signal with respect to the input speech signal, the reproduced speech signal obtained by exciting a linear prediction synthesis filter prescribed by a set of linear prediction coefficients of the input speech signal, wherein the coding delay is a time from when the input speech signal is received until a start of coding.

5. A speech coding method for coding an input speech signal on the basis of control parameters, comprising:

receiving a coding delay and a designated bit rate as control data, and
generating said control parameters on the basis of the coding delay and the designated bit rate; and

determining, based on said control parameters, an input excitation signal, the determining performed so as to minimize distortion of a reproduced speech signal with respect to the input speech signal, the reproduced speech signal obtained by exciting a linear prediction synthesis filter prescribed by linear prediction coefficients of the input speech signal, wherein the coding delay is a time from when the input speech signal is received until a start of coding.

9. A speech decoder for restoring a reproduced speech signal from received coded speech data, the received coded speech data including an excitation signal, linear prediction synthesis filter coefficients, a designated bit rate and a coding delay, the decoder comprising:

a control circuit for receiving said designated bit rate and said coding delay as control data and generating control parameters on the basis of said designated bit rate and said coding delay; and

a speech decoding means for first restoring the reproduced speech signal by second restoring the excitation signal and the linear prediction synthesis filter

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coefficients, the second restoring performed by decoding the received coded speech data based on the control parameters, the first restoring further including exciting a linear prediction synthesis filter prescribed by the linear prediction synthesis filter coefficients, on the basis of the excitation signal, wherein the coding delay is a time from when the input speech signal is received until a start of coding.

Allowable Subject Matter

2. Claims 1-13 are allowed over prior art of record. The following is an examiner's statement of reasons for allowance: Hosoda et al. (US 5727122) disclose a CELP coder/decoder system in that input speech is processed and analyzed to determine the best code-vectors representing the analyzed input speech. Code-vectors in term of index code along with other control index codes are transmitted to the decoder, which recovers the original speech signal using transmitted index codes. Also, the structure and functionality of a CELP coder/decoder is well known in the art. Hosoda et al. fail to specifically disclose the step of generating control parameters including frame length using input coding delay and bit rate, wherein the coding delay is specifically defined as a time from when the input speech signal is supplied until a start of coding.

Furthermore, it would have not been obvious to one of ordinary skill in the art at the time of invention to modify Hosoda et al. in order to obtain the claimed invention. Therefore, claims 1-15 allowed over prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen X. Vo whose telephone number is 571-272-7631. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HXV

1/6/2006


SUSAN MCFADDEN
PRIMARY EXAMINER